



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,031	02/23/2004	Christopher Martin	200209039-2	3785

22879 7590 10/02/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

HASSAN, AURANGZEB

ART UNIT PAPER NUMBER

2182

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,031

Applicant(s)

MARTIN, CHRISTOPHER

Examiner

Aurangzeb Hassan

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 1-21, 28 and 30-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-27, 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species II in the reply filed on 6/19/2006 is acknowledged. The traversal is on the ground(s) that the Examiner has not covered two aspects of requirement of restriction: (a) reasons why the inventions as claimed are either independent or distinct; and (b) the reasons for insisting upon restriction there between (MPEP section 808). This is not found persuasive because (a) the Examiner clearly pointed out the independent and distinct characteristics of the claimed invention in the species restriction and (b) is not for a species restriction. The applicant further states that the claims are not species and are not restrictable, however fails to point out how they are not species. The fact that the applicant argues claim 1 is generic is evidence that the grouping of claims are related as species.

The requirement is still deemed proper and is therefore made FINAL.

Claims 1 – 36 are pending, claims 1 – 21, 28, 30 – 36 are withdrawn from consideration. Elected claims 22 – 27 and 29 (see interview summary) are rejected below.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2182

Claims 22 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 22 and 25 recites the limitation "said data compression engine" in lines ^{2 KN} 4 and 5 respectively. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 22, 25 – 27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (US Patent Number 6,069,763).

5. As per claim 22, 25, 26, 27 and 29, Aoki teaches a tape drive unit comprising: a data compressor (rotary control mechanism 5, figure 1A) capable of applying compression to an incoming data stream (data compression means, column 5, lines 47 – 67); a buffer memory capable of storing data of said incoming data stream (buffer 1, figure 1A, column 3, lines 46 – 55); a monitoring element capable of monitoring a data occupancy level of said buffer memory (tape residual amount sensing mechanism 2,

Art Unit: 2182

column 4, lines 18 – 25); and a control element capable of enabling or disabling said data compression engine (on/off control element from the memory, column 2, lines 9 – 15); said control element being operable to disable said data compression engine in response to said data occupancy level of said buffer memory being below a predetermined level (memory is used as a basis for the off position, column 1 lines 59 – 67, column 2, lines 1 – 15).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Langdon Jr. et al. (US Patent Number 5,097,261 hereinafter "Langdon").

8. As per claim 23, Aoki teaches a tape drive unit comprising: a tape wherein said tape is operable to continue streaming of said tape, whilst said data compression engine is in an enabled mode, and whilst said compression engine is in a disabled mode (controlling the data compression engine with on/off enable/disable functionality, column 2, lines 9 – 15).

Art Unit: 2182

Aoki does not disclose a mechanism for transporting data past a transducer.

Langdon analogously teaches a tape transport mechanism for transporting a tape data storage medium past a transducer (column 5, lines 51 – 55); wherein said tape transport mechanism is operable to continue streaming of said tape (conducted during write and read data cycle, column 16, lines 58 – 67, column 17, lines 1 – 28).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Aoki with the above teachings of Langdon. One of ordinary skill would be motivated to make such modification in order to provide an enhanced data compression procedure for storing an increased amount of data onto a recording media (column 1, lines 57 – 60).

9. Aoki as modified by the teachings of Langdon as in claim 23 above, as per claim 24, Langdon teaches a tape drive unit comprising: a tape transport mechanism for transporting a tape data storage medium past a transducer (column 5, lines 51 – 55); and Aoki teaches a tape speed control element for controlling said tape transport mechanism for transporting said tape at a variable speed: said tape speed being variable according to a data occupancy level of said buffer memory (speed varies according to the data residual amount in the buffer, column 4, lines 7 – 25).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent Number 4,423,480 is cited for its transducer

Art Unit: 2182

combination with a data compression system as applicable to the current application.

US Patent Number 5,969,897 is cited as a data recording system on a tape media with varying speed adjustments as applicable to the current application.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571)272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AH


KIM HUYNH
SUPERVISORY PATENT EXAMINER

9/29/06